

**John Monsees
Green Design and the City
October 25, 2005**

**Nature in the City Report:
Central Park: Manhattan's Oasis**

Central Park in New York City is one of the world's most celebrated urban parks. This green oasis is one of the most recognizable features on any map of New York City. It occupies a rectangular tract of 843 acres in the center of Manhattan, and includes 250 acres of lawns and meadows, 136 acres of woodlands, and 150 acres of surface water in four lakes and ponds. Central Park is enjoyed by an estimated 25 million people each year.¹

I. The History of Central Park

¹Central Park Conservancy Website, "FAQs", accessible at <http://www.centralparknyc.org/centralparkhistory/faqs>.

The nineteenth century was a period of extraordinary transformation for the New York City. The population of New York City exploded from approximately 62,500 residents in 1800 to more than 2.7 million people in 1890.² By 1850, when the population already had increased by more than ten times what it had been in 1800, civic leaders began acknowledging a popular desire for a large public greenspace in Manhattan.³ At that time, the urbanized boundary of Manhattan extended only to 38th Street, and most people lived south of 14th Street. The New York State Legislature committed funding for a 700 acre “Central Park” to extend from the planned 59th Street to 106th Street. While much of this land was undeveloped and rural in appearance, there were homes and businesses located within this tract, including New York’s first community of African-American property owners known as Seneca Village. Between 1853 and 1856, the City spent more than \$5 million to acquire all of these properties through eminent domain proceedings.⁴ Approximately 1,600 people were forced to relocate their homes to make way for the Park.⁵

The Legislature established the Central Park Commission to develop the Park. The Commission sponsored a park design contest in 1857. The Commission received 33 submissions for the design of the new park. The winning design, known as the “Greensward Plan”, was submitted by Frederick Law Olmsted and Calvert Vaux.⁶

The “Greensward Plan” sought to recreate the pastoral landscapes favored by the English

²Platt, Rutherford H., “The Ecological City: Introduction and Overview” in Platt, R.H., et al., ed., The Ecological City, p. 4 (Univ. of Mass. Press 1994).

³Garvin, A., The American City: What Works, What Doesn’t, pp. 33-34 (McGraw-Hill 2002).

⁴Central Park Conservancy Website, “150+ Years of Park History: 1800-1858”, accessible at <http://www.centralparknyc.org/centralparkhistory/cp-history-150yrs/cphistory1800-1858>.

⁵New-York Historical Society Website on “Seneca Village”, accessible at <http://www.nyhistory.org/seneca>.

⁶Central Park Conservancy Website, “150+ Years of Park History: 1800-1858”, accessible at <http://www.centralparknyc.org/centralparkhistory/cp-history-150yrs/cphistory1800-1858>.

romantics during the nineteenth century. The “Greensward Plan” encouraged public use of the Park by incorporating various recreational applications, including ballfields, playgrounds, and lakes for boating and skating, which were connected to separate transitways for pedestrian, equestrian and vehicular traffic. Olmsted and Vaux anticipated the growth of Manhattan by designing four roads to cross the Park and connect the East and West Sides of Manhattan. These roads were set in depressed courses screened by landscaping and vegetation so as to preserve the natural appearance of the Park and hide the cross-town traffic.⁷ In 1863, the City acquired additional acreage to extend the Park’s northern boundary to 110th Street.⁸

⁷Garvin, A., The American City: What Works, What Doesn't, p. 34 (McGraw-Hill 2002).

⁸“Central Park”, New York City Department of Parks & Recreation Website, accessible at http://www.nycgovparks.org/sub_your_park/vt_central_park.

Although much of the Park looks natural, it is the product of an extensive landscaping effort. Much of the land on which the Park is situated was rocky or swampy. In order to achieve the scenic, green vistas envisioned by Olmsted and Vaux, the terrain of the Park was filled, graded and sculpted. The “Greensward Plan” called for the planting of more than 4 million trees, shrubs and plants from more than 1400 species. To facilitate this planting effort, more than 500,000 cubic feet of topsoil was brought into the City. Wet areas were dredged and dammed to form lakes and ponds. Old buildings were demolished and thirty-six bridges built across waterways and transitways. All of the earthmoving tasks were accomplished by manual labor and horse-carts. Construction of the Park began in 1857 and was completed by 1877. Some 20,000 workers labored on the Park during the height of construction.⁹

⁹Central Park Conservancy Website, “150+ Years of Park History: 1858-1878”, accessible at <http://www.centralparknyc.org/centralparkhistory/cp-history-150yrs/cphistory1858-1878>.

Central Park quickly became very popular with New Yorkers and the development of Central Park sparked an urban parks initiative in American cities.¹⁰ Over time, however, the Park suffered as the pressures of the City's increasing population, urbanization, and poor maintenance took a toll on the Park's vegetation and facilities. In 1934, a new park commissioner, Robert Moses, embarked on a campaign to improve the Park by cleaning it up and restoring its flora. The Croton Reservoir within the Park was filled in to create the Great Lawn. Moses believed that the Park should serve the recreational needs of the City and he added playgrounds, ballfields, handball courts and a skating rink to the Park.¹¹ After Moses retired from his position in 1960, the Park endured another period of decline. The social turmoil of the 1960s and the City's financial crisis of the 1970s resulted in a steady deterioration of the Park's facilities. The Park's situation began to improve with the creation of the Central Park Conservancy in 1980. The Conservancy initiated a public-private partnership with the City government to improve the Park. The Conservancy developed a master restoration plan for the Park and began soliciting private funding to supplement money raised by the City through the issuance of bonds. By 1999, the Conservancy had amassed an endowment of \$65 million, and had assembled a paid staff of 250 people and a cadre of 1,200 volunteers.¹² The Conservancy has raised more than \$300 million for the improvement and maintenance of Central Park.¹³

II. Central Park Today

The size of Central Park lends itself to a variety of public uses, which reflect the

¹⁰Platt, R.H., "From Commons to Commons: Evolving Concepts of Urban Space in North American Cities", in Platt, R.H., et al., ed., The Ecological City, p. 21 (Univ. of Mass. Press 1994).

¹¹Central Park Conservancy Website, "150+ Years of Park History: 1878-1960", accessible at <http://www.centralparknyc.org/centralparkhistory/cp-history-150yrs/cphistory1878-1960>.

¹²Garvin, A., The American City: What Works, What Doesn't, p. 44 (McGraw-Hill 2002).

¹³Central Park Conservancy Website, "150+ Years of Park History: 1980-Present", accessible at <http://www.centralparknyc.org/centralparkhistory/cp-history-150yrs/cphistory1980-present>.

heterogenous nature and interests of New Yorkers. The Central Park Conservancy divides the Park into four sections: the South End (59th Street to 72nd Street); the Great Lawn (72nd Street to 85th Street); the Reservoir (85th Street to 97th Street) and the North End (97th Street to 110th Street). All of these Sections are interlinked by a system of park drives and walking paths, as depicted on the attached map.¹⁴ An overview of some of the more prominent attractions of the Park demonstrates how the Park has evolved to support its primary mission of providing a wide range of recreational activities. Many of the familiar attractions of Central Park are found in the South End. The southern corners of the Park are anchored by Merchants Gate off of Columbus Circle and the Grand Army Plaza. The 15-acre lawn of Sheep Meadow, the site of many outdoor concerts, occupies the middle of this section. Olmsted and Vaux's original pedestrian Mall is located to the east of Sheep Meadow. The Children's Zoo and Wildlife Center are located along the eastern edge of the South End. Wollman Rink, an outdoor ice-skating rink, is found in the southeastern corner. The South End also boasts four playgrounds.¹⁵

¹⁴Central Park Map, available as a download from the Central Park Conservancy Website, <http://www.centralparknyc.org>.

¹⁵Central Park Conservancy Website, accessible at <http://www.centralparknyc.org/virtualpark>.

Moving north, the next section of the Park is named for the Great Lawn, which is the largest landscaped feature of the Park which was not part of the “Greensward Plan”. When Olmsted and Vaux designed the Park, Great Lawn was the site of a 33-acre Croton Reservoir. The Reservoir was filled in 1931 to create the Great Lawn, which now includes two playgrounds and eight ballfields. This section of the Park features the Lake, the second largest water body in the Park. Rowboats can be rented for use on the Lake. Olmsted and Vaux created the Lake by dredging and damming an 18-acre swampy area. The Ramble, a 38-acre garden forest, lies between the Great Lawn and the Lake. The Metropolitan Museum of Art is found on the eastern side of the Great Lawn section.¹⁶

The Reservoir Section is named for the Reservoir, a 106-acre body of water which is 40 feet deep. While the Reservoir is no longer used to supply fresh water to City residents, its water feed the smaller water bodies in the North End of the Park. The Reservoir Section contains the Park’s Tennis Center which boasts thirty tennis courts. Three playgrounds are located in this section.¹⁷

The North End Section is home to the North Meadow, the largest open space in the Park. The North Meadow has a recreation center and twelve ballfields. The six-acre Conservatory Garden is located on the east side of this Section. The northeast corner of the Park is anchored by the Harlem Meer, an 11-acre lake where “catch-and-release” fishing is permitted. The Lasker Pool and Rink is also found in the North End.¹⁸

III. The Green Utility of Central Park

Aside from providing New Yorkers with a wealth of sporting and recreational options, Central Park provides city residents with a natural respite from Manhattan’s urban environment. Researchers have found that the availability of trees in an urban environment is important to the

¹⁶Central Park Conservancy Website, accessible at <http://www.centralparknyc.org/virtualpark>.

¹⁷Central Park Conservancy Website, accessible at <http://www.centralparknyc.org/virtualpark>.

¹⁸Central Park Conservancy Website, accessible at <http://www.centralparknyc.org/virtualpark>.

mental health and emotional well-being of city dwellers.¹⁹

¹⁹Dwyer, J., et al., “The Deep Significance of Urban Trees and Forests”, in Platt, R.H., et al., ed., The Ecological City, pp. 137-138, (Univ. of Mass. Press 1994).

The Park has a positive ecological value in the midst of the New York metropolis, because it provides a habitat for a surprising number of species. Small mammals, such as mice, voles and the ubiquitous squirrels are found in the wooded areas and meadows. Frogs, crayfish and fish are found in the waters of the Park. The Park serves as an important stop for birds migrating through the New York metropolitan region. Bird watchers have observed more than 275 species of migratory birds using Central Park²⁰

The Park hosts a wide variety of plants, including 26,000 trees, more than 500 species of shrubs and over 800 species of perennials.²¹ Several acres in the southeastern corner of the Park are maintained as a restricted-use forest to serve as a nature sanctuary.²² Central Park is notable for having one of the last surviving stands of American Elm trees in the United States. The Park has 1,700 American Elm trees, which have been protected from the ravages of Dutch Elm disease because of their isolation in the urban core of Manhattan.²³

Studies have shown that urban parks are sources of fresh, cool air to the surrounding urban “heat islands”.²⁴ The Park’s vegetation provides a source of fresh, oxygenated air and a cooling influence on Manhattan’s atmosphere. Central Park’s water bodies provide further cooling influences on Manhattan’s air.

The Park also reduces Manhattan’s stormwater runoff burden to its surrounding rivers by

²⁰“Central Park” entry in Wikipedia, accessible at http://en.wikipedia.org/wiki/Central_Park.

²¹New York City Department of Parks & Recreation Website, “Central Park”, accessible at http://www.nycgovparks.org/sub_your_park/vt_central_park.; Central Park Conservancy Website, <http://www.centralparknyc.org/centralparkhistory/faqs>.

²²“Hallet Nature Sanctuary, Central Park”, New York City Department of Parks & Recreation Website, accessible at http://www.nycgovparks.org/sub_about/parks_divisions/nrg/forever_wild.

²³Central Park Conservancy Website, <http://www.centralparknyc.org/centralparkhistory/faqs>.; “Central Park” entry in Wikipedia, accessible at http://en.wikipedia.org/wiki/Central_Park.

²⁴McPherson, E.G., “Cooling Urban Heat Islands with Sustainable Landscapes”, in Platt, R.H., et al., ed., *The Ecological City*, pp. 158-159 (Univ. of Mass. Press 1994).

serving as a natural drain for precipitation to the subsurface, where the infiltrating water is used by the plants of the Park or recharges the groundwater or surface waters of the Park.

Illustration Sources

Slide 1: “Central Park” entry in Wikipedia, accessible at http://en.wikipedia.org/wiki/Central_Park.

Slide 2: New York City Department of Parks & Recreation Website, “Central Park”, accessible at <http://www.nycgovparks.org>.

Slide 4: New-York Historical Society Website on “Seneca Village”, accessible at <http://www.nyhistory.org/seneca>.

Slide 10: Central Park Map, The NYC Insider, accessible at <http://www.theinsider.com/nyc/maps>.

Slides 5: